

WHAT IS CLAIMED IS:

1. A method of soldering an electrical connection, comprising:

1) forming a plurality of terminals on an insulating casing, the terminals transversally extending through and being exposed by the insulating casing, a plurality  
5 of first slots being formed in a bottom of the insulating casing to communicate respectively with the terminals;

2) applying a solder material over electrical contacts of a circuit board for bonding the electrical connection to the circuit board, wherein the first slots in the bottom of the insulating casing correspond to the solder material; and

10 3) melting the solder material by heating, wherein a height of the solder material increases due to a cohesion effect and the solder material extends into the first slots and bonds to the terminals.

2. The method of claim 1, wherein in step 1) each terminal has a contact tip and a fastening tip, the contact tip being located outside the insulating casing, the fastening tip  
15 being located inside the casing, and one first slot communicating with one fastening tip.

3. The method of claim 1, wherein in step 1) the insulating casing is further formed with a plurality of second slots through which the terminals penetrate.

4. The method of claim 1, wherein in step 1) the terminals are fastened to the insulating casing by implanting.

20 5. The method of claim 1, wherein in step 1) a metal sheet is further embedded in the insulating casing to communicate with some of the first slots on the insulating casing, and in step 3) the solder material is melted by heating to bond to the metallic sheet.

6. The method of claim 1, wherein in step 1) a plurality of through holes are formed in a top of the insulating casing to correspond respectively to the first slots, the fastening tip of each terminal being formed with a pinhole to correspond to one respective through hole and first slot, the pinhole being smaller than the through hole  
5 and the first slot, and in step 3) the solder material flowing in the through holes via the pinholes after being melted.

7. The method of claim 1, wherein a plurality of through holes are formed in a top of the insulating casing to correspond to the first slots, a plurality of soldering sheets being respectively stamped on a fastening tip of each terminal to correspond to the  
10 through holes and the first slots, the soldering sheets being bent toward the circuit board, and in step 3) the solder material flowing through the first slots to the through holes after being melted so as to cover the soldering sheets.

8. The method of claim 1, wherein in step 1) a plurality of bumps are respectively formed on the fastening tips of the terminals to correspond to the first slots of the  
15 insulating casing, and the bumps protrude toward the circuit board.

9. A method of soldering an electrical connection, comprising:

1) forming a plurality of terminals on an insulating casing, the terminals extending lengthwise through the insulating casing, a plurality of first slots being formed in a bottom of the insulating casing to communicate respectively with ends of  
20 the terminals;

2) applying a solder material over electrical contacts of a circuit board for bonding the electrical connection to the circuit board, wherein the first slots in the bottom of the insulating casing correspond to the solder material; and

3) melting the solder material by heating, wherein a height of the solder material increases due to a cohesion effect so as to extend into the first slots and bond the terminals.

10. The method of claim 9, wherein in step 1) each terminal has a contact tip and a fastening tip, the contact tip being located outside the insulating casing, the fastening tip being located inside the casing, and the first slots respectively communicating with the fastening tips.

11. The method of claim 9, wherein in step 1) the insulating casing is further formed with a plurality of second slots through which the terminals penetrate.

10 12. The method of claim 9, wherein in step 1) the terminals are fastened to the insulating casing by implanting.

13. The method of claim 9, wherein in step 1) a metal sheet is further embedded in the insulating casing and communicates with some first slots on the insulating casing, and in step 3) the solder material is melted by heating to bond to the metallic sheet.

15 14. The method of claim 9, wherein in step 1) an end of each terminal corresponds to one first slot of the insulating casing, a width of each terminal being larger than a diameter of a corresponding first slot.

15. The method of claim 9, wherein in step 1) an end of each terminal aligns with a central portion of a corresponding first slot.

20 16. The method of claim 9, wherein in step 1) an end of each terminal aligns with a central portion of a corresponding first slot.

17. The method of claim 9, wherein an end of each terminal is formed with a protruding part for insertion in each first slot of the insulating casing, the protruding part having a notch therein for accommodating a solder material to bond the terminals.

18. The method of claim 9, wherein a protruding part is formed on an end of each terminal for insertion in each first slot of the insulting casing, the protruding part having a width smaller than a diameter of each slot, and in step 3) a solder material flowing in the first slots after being melted to cover the protruding part.

5        19. A method of soldering an electrical connection, comprising:

1) forming a plurality of terminals on an insulating casing to accomplish an electrical connection, wherein a plurality of slots is formed in a bottom of the insulating casing to communicate respectively with the terminals.

2) applying a solder material along a periphery of the slots to correspond to  
10    electrical contacts of a circuit board for bonding the electrical connection to the circuit board.

3) melting the solder material by heating, wherein the solder material increases in height to extend into the slots by cohesion effect, thereby bonding the terminals to the electrical contacts of the circuit board.

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